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Further Studies on the Systematics of Australian Ctenizid Trapdoor Spiders: Description of a New Species of *Homogona* Rainbow from Victoria (Mygalomorphae: Ctenizidae).

By Barbara York Main*

Introduction

This paper is the ninth in a series dealing with the systematics of Australian Ctenizidae. Earlier papers in which new ctenizid species were described or genera reviewed were listed by Main (1983 and in press).

Main (1983) transferred *Homogona* Rainbow from the Migidae to Ctenizidae and elevated the tribe Homogonini to subfamily rank. Raven (1984) does not recognize the subfamily Homogoninae. Nevertheless, until affinities of *Homogona* with ctenizid genera outside Australia is elucidated and reorganization of the family is undertaken I retain the subfamily ranking of Homogoninae. Its members are distinguished from other Australian ctenizids by the absence of a rastellum.

Main (1983) recognized two species of *Homogona*, *H. pulleinei* Rainbow and *H. cunicularius* Main. Both species occur in rainforests; the former is confined to south eastern Queensland and north eastern New South Wales, the latter to northern Queensland. Main also indicated that *pulleinei* might comprise a complex of species. The occurrence of species of an undescribed genus of the Homogoninae in southern Australia was also mentioned by Main (1983, p. 81). These species, from the Stirling and Porongurup Ranges (Western Australia) and Victoria had previously been alluded to as migids (Main, 1976; p. 69). Main (in press) has subsequently described the new genus from Western Australia but there stated that the Victorian species belongs in *Homogona*. The new species is described here.

Homogona victoriae sp. n. (Figs. 1-7)

Holotype ♀ *Colour* generally brown, carapace glabrous; legs with dark markings, abdomen mauvish-brown with

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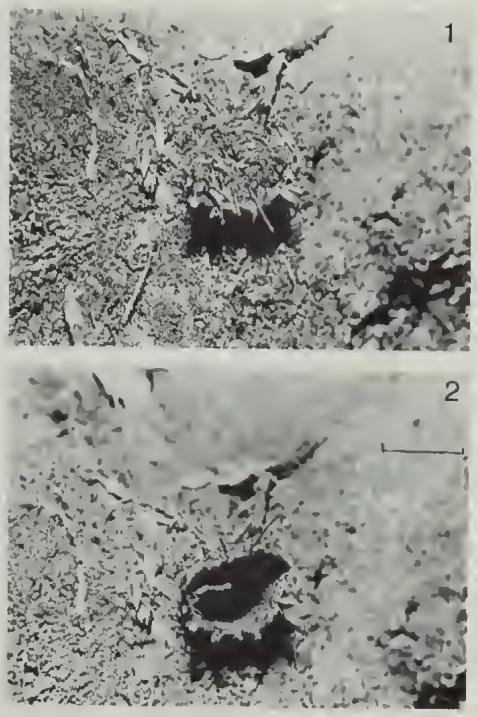
pale, narrow dorsal transverse divided bars. Carapace length 8.2 mm, width 6.3, caput width 4.7. *Carapace* with deep cervical and radial depressions; stout marginal bristles; a line of short bristles between eyes and fovea; short scattered bristles over carapace. Fovea almost straight, reflexed at edges, a deep notch-like depression behind fovea. *Eyes.* Length of eye group 0.9, anterior width 1.5, posterior width 1.4. Diameters of eyes ALE 0.4, AME 0.2, PLE 0.3, PME 0.15; ALE apart 0.9; ALE from PLE 0.4. Anterior row procurved. *Chlicerae.*

Apically rounded and with heavy dorsal bristles (Fig. 3). Teeth rows of groove indistinctly demarcated, promargin with large teeth (right 9, left 8), retromargin with small teeth (right 6, left 5) (Fig. 6). *Labium.* Length 1.3, width approximately 1.5, anteriorly truncate; with long bristles and two bluntly pointed cuspules (more in many specimens), *Maxillae.* Pronounced antero-ectal process; long rounded heel, about 40 cuspules spread from antero-ental angle to mid point. *Sternum.* Length 4.0, width 3.5; long scattered bristles; sigilla round, posterior well away from margin; narrow suture between labium and sternum. *Legs* and palps with numerous lobate sculptured bristles and hairs in addition to sparse "normal", acutely terminating bristles. Paired *tarsal claws* with one large tooth and sometimes a minute tooth underneath; median claw smooth. *Trichobothria.* Tarsi with 7 to 11 (of which proximal 2 to 4 are baton-like), metatarsi with 6 to 9, tibiae with 3 to 5 in each of two proximal rows.

Spines. Heavy ventral spines in irregular biserial rows. Palp, tarsus pv 6, rv 7, tibia pv 9, rv 8, p 6, patella pv 2, rv 1, femur pv 2 apical +1. Leg I, tarsus pv 6, rv 4, metatarsus pv 10, rv 11, tibia pv 10, rv 8, patella 2 ventral apical. Leg II, tarsus pv 6, rv 4, metatarsus pv 6, rv 4, tibia pv 3, rv 4. Leg III, tarsus v 4, metatarsus v 7, pd 2, rd 1, tibia v bristles, pd 1, patella p 2. Leg IV, tarsus v 2, metatarsus v 6.

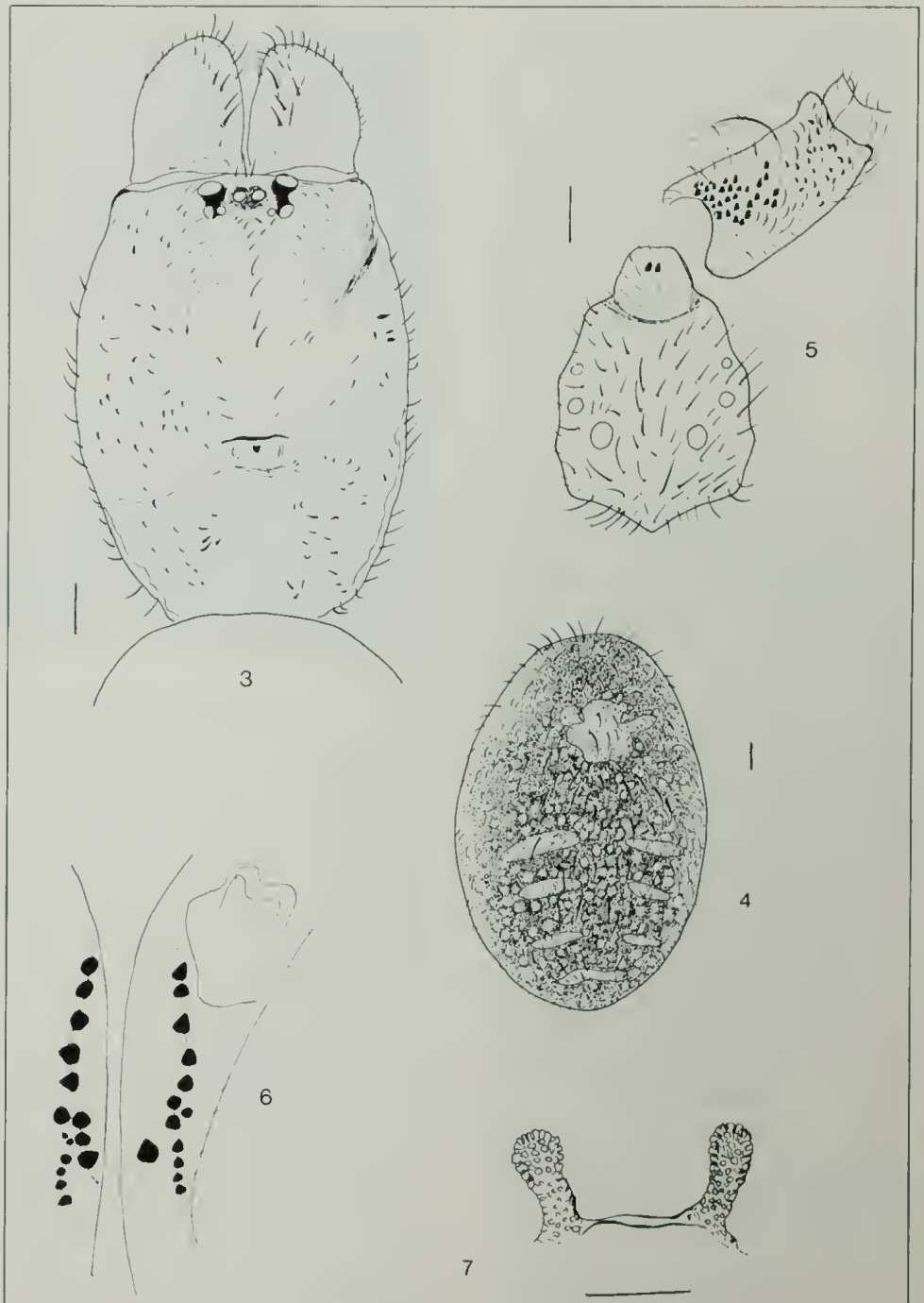


Figs. 1, 2. *Homogona victoriae* sp. n.; entrance of burrow of specimen from Barney's Creek, Grampian Mountains; 1, closed; 2, open. Scale = 1.0cm

Abdomen length about 13.5 mm, width 9.7. Heart with four paris ostia (BYM 1959/409). Two pairs spinnerets, median pair not reduced. Internal genitalia a pair of broad stemmed, terminally dilated vesicles, connected at the base by a narrow, transverse atrium (Fig. 7, paratype BYM 1959/412A).

Type material: HOLOTYPE ♀ : Victoria, Grampian Mountains, Barney's Creek, 14 Dec. 1959, B. Y. Main (BYM 1959/411, Museum of Victoria K-162).

PARATYPES. (All collected by B. Y. Main, various localities Grampians Mts.). Same data as holotype: ♀ internal genitalia dissected, (BYM 1959/412A, Museum of Victoria K-163); ♀ , (BYM 1959/408, Australian Museum KS 15534); ♀ , heart dissected, (BYM 1959/409); ♀ , (BYM 1959/410); 2 ♀♀ , 7 juveniles (BYM 1959/412); immature ♂ , kept



Figs. 3-7. *Homogona victoriae* sp. n. females, 3-6 (holotype); 3, carapace and chelicerae; 4, abdomen dorsal view; 5, sternum, labium and left maxilla; 6, cheliceral grooves with teeth; 7, internal genitalia, paratype (BYM 1959/412A, Museum of Victoria K-163).
Scale: 3-5 = 1.0 mm; 7 = 0.5 mm; 6, not to scale.

Table 1. Leg measurements of *Homogona victoriae* sp. n., female holotype.

Leg formula:	4	1	2	3		
	2.47	2.17	1.96	1.62		
	F	P	Ti	M	Ta	Total
Palp	4.7	2.6	3.0	—	3.3	13.6
I	6.1	3.5	3.9	3.3	2.0	18.8
II	5.2	2.8	3.3	2.9	1.9	16.1
III	4.1	2.3	2.5	2.6	1.8	13.3
IV	6.2	3.3	4.3	4.2	2.3	20.3

Width of patella I at knee, 1.4; Tibial index, 1.89
Width of patella IV at knee, 1.4; Tibial index, 1.71

alive in laboratory for two and a half years, moulted autumn 1960, died before maturation, (BYM 1959/413). ♀ with egg sac, Delly's Dell, 14 Dec. 1959, in tree fern trunk, (BYM 1959/416); ♀ , same data, specimen dead infested with (parasitic?) maggots, (BYM 1959/417); gravid ♀ , Barney's Creek, 8 Feb. 1965, (BYM 1965/6); ♀ , same data as preceding, (BYM 1965/7); ♀ , with egg cocoon, Silverband Falls Road (Delly's Dell), 8 Feb. 1965, (BYM 1965/9); ♀ with brood, Dairy Creek Road, 27 Nov. 1965, (BYM 1965/702).

Other material tentatively included in *H. victoriae*: All from Mt. Beauty Victoria, collected by B. Y. Main. Juvenille, 20 Nov. 1965, (BYM 1965/667); 3 ♀♀ (BYM 1965/668, 669, 670); ♀ , 2 juveniles (BYM 1965/672); penultimate ♂ , died in laboratory (BYM 1965/673).

Distribution: Known only from the Grampian Mountains and Mt. Beauty.

*Natural history:*The spiders build burrows in wet, shaded gullies, frequently in the mossy banks of creeks. The nests are shallow, silk-lined and closed by drawing over one side of a soil-impregnated silk collar which effectively simulates a hinged door (Figs. 1, 2). A female with egg cocoon was collected on 8 February 1965, and females with brood young in the burrow were collected on 14 December 1959 and 27 November 1965. Presumably males run in the early summer.

No adult males have been collected but females are distinguished from the other species by the irregular arrangement of the cheliceral teeth, fewer "clubbed hairs", fewer labial cuspules; and further, from *cunicularius* by the stouter internal genitalia and "door" of nest. Thus further postponement of a description seems unwarranted, particularly in view of the apparently disjunct distribution and hence zoogeographic interest of the genus.

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